The Monitor

The Newsletter of the ETV Advanced Monitoring Systems (AMS) Center

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11 helpers count…

Partner Organizations Continue To Add Value, Cost-Sharing

The four partner organizations currently providing assistance in the ongoing verification of test kits that can detect atrazine in water are providing the most recent example of the values and cost savings resulting from such collaboration. Here are summaries of the partner support for this verification test:

- The National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service's Center for Coastal Environmental Health and Biomolecular Research Center at Charleston, SC, and the University of Missouri-Rolla provided environmental samples.

- The U.S. EPA's Office of Pesticide Programs, Environmental Chemistry Branch at the John C. Stennis Space Center provided reference laboratory analyses.

- The Texas Commission on Environmental Quality provided personnel to operate test kits.

Since its inception in 1997, the Advanced Monitoring Systems (AMS) Center has benefited from its first partnership—with the U.S. EPA. The AMS Center has also gained support from 11 collaborators and partners in its verification test process. They include state and federal agencies, organizations, military branches, and research facilities.

The partners have given varying types of financial assistance and in-kind contributions to the verification test process, such as providing the host site for the verification test, on-site personnel to help conduct the test, reference measurements that form the basis for technology verification, cost-sharing to support testing, and expert peer reviewers of test plans and reports. Here are examples:

City of Columbus, Ohio. Two rounds of testing of five continuous on-line turbidimeters were conducted at a water treatment facility managed by the city's Division of Water.

Electric Power Research Institute (EPRI). EPRI contributed funds for the verification test of ammonia CEMs conducted at the American Electric Power's Mountaineer coal-fired power plant.

Massachusetts Department of Environmental Protection (DEP). The DEP provided funding for a verification test of four continuous emission monitors (CEMs) for mercury. They were tested at a pilot-scale combustion system, under varying mercury concentrations, particulate loading, and flue gas composition.

NOAA's Center for Coastal Environmental Health and Bio-molecular Research Center). In addition to the atrazine testing support, NOAA was the host site for the test of multi-parameter water probes. NOAA staff assisted Battelle in developing the test plan, oversaw daily test activities, and collected reference samples for analysis.

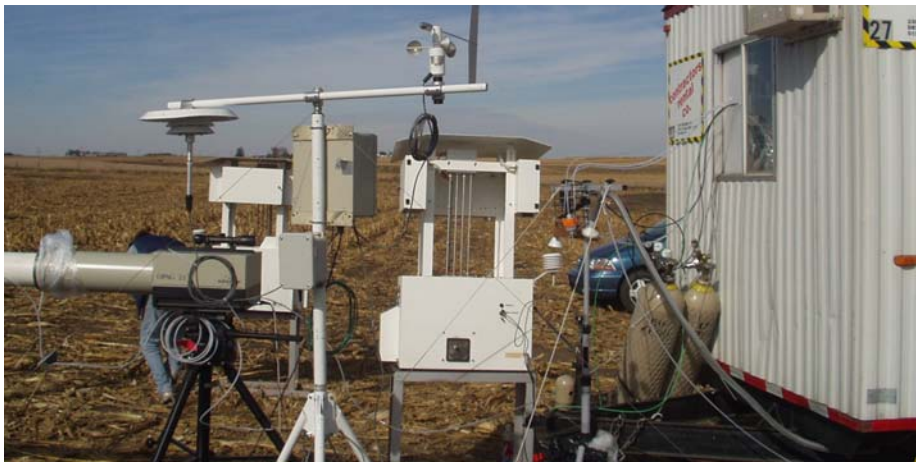
U.S. Army. The U.S. Army's Construction Engineering Research Laboratory provided the test facility (a hazardous waste incinerator in Tooele, UT) and operations staff, reference measurements, and data reduction assistance.

U.S. Department of Agriculture (USDA). The USDA hosted a Technology Field Day at its Agricultural Research Service in Ames, Iowa, and collaborated in the test of technologies that can measure gaseous ammonia in ambient air. Officials from USDA and U.S. EPA presented information about their work, responded to questions from attendees, and joined the tour of an animal feeding operation.

(See Partners on Page 2)

Partners *(from Page 1)*

U.S. Department of Energy (DOE). DOE has provided support for two verification tests conducted at different sites. The agency's National Energy Technology Laboratory (NETL) in Pittsburgh, PA, provided the site and personnel for the verification test of 13 monitors that continuously measure fine particulate mass and species in ambient air. NETL also co-hosted the first Technology Field Day with U.S. EPA and the AMS Center. DOE provided the test site at its Toxic Substance Control Act incinerator in Oak Ridge, TN, where five mercury CEMs were tested.



The equipment pictured is collecting data during the AMS Center's verification test to measure gaseous ammonia in ambient air in two phases at animal feeding operations—swine and cow farms—in Iowa.

ETV Verifications Continue To Grow

The ETV program has completed 240 technology verifications since its inception in 1997, through the 2003 fiscal year. The total verifications by technology areas were: monitoring–112, air–55, water–43, and pollution prevention–24.

Included in the program's monitoring count were the 61 verifications of air and water monitoring technologies completed by the Advanced Monitoring Systems (AMS) Center through September 30.

During the 2003 fiscal year alone, the ETV program completed 40 verification tests, including 14 by the AMS Center. The ETV program predicts that an additional 49 verifications will be completed during the 2004 fiscal year.

Currently, there are 108 technologies in the testing process and 21 stakeholder committees comprised of 805 members. Members of these stakeholder committees assist in identifying needed technologies, technology developers, and users of the technologies; provide insights about various upcoming federal and state regulatory requirements; identify potential test sites and partners or collaborators; and serve as reviewers of test plans, verification reports, and statements.

Verification Tests Planned

Ammonia CEMs. Vendors or partners interested in participating in a second round of the verification test for these technologies should contact Ken Cowen, 614-424-5547 or cowenk@battelle.org.

Beach monitoring technologies. Vendors interested in participating in a verification test for these technologies should contact Amy Swiecichowski, 561-656-6304 or swiecichowskia@battelle.org (see article in the July 2003 issue of *The Monitor*).

Cyanide analyzers. A second round of this test in being planned. Interested vendors should contact Ryan James, 614-424-7954, or jamesr@battelle.org.

Immuno-assay test kits for biotoxins. Interested vendors should contact Ryan James (see above).

Mercury CEMs. A third round is to be conducted for mercury CEMs at a coal-fired power plant. Interested vendors or partners should contact Tom Kelly, 614-424-3495, or kellyt@battelle.org.

Portable analyzers for arsenic in water. A third round will be conducted in fresh water and drinking water in Duxbury, MA. Interested vendors should contact Patty White, 781-952-5279, or whitepj@battelle.org.

Rapid polymerase chain reaction (PCR) technologies. Vendors interested in participating in a verification test for these technologies should contact Stephanie Buehler, 614-424-3972, or buehlers@battelle.org.

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